SUBJECT: Preliminary Assessment and Additional Funding Request for CERCLA Removal Action Authorization for Conus Chemical, Newark, Essex County, New Jersey, ACTION MEMORANDUM

FROM: Angel C. Rodriguez, On-Scene Coordinator
Response and Prevention Branch

TO: Constantine Sidamon-Eristoff
Regional Administrator

THRU: Stephen D. Luftig, Director
Emergency and Remedial Response Division

I. ISSUE:

On February 9, 1990, Lance R. Miller, Acting Director of the Hazardous Waste Division for the State of New Jersey Department of Environmental Protection (NJDEP), requested that the U.S. Environmental Protection Agency (EPA) undertake a removal action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended in 1986, by the Superfund Amendments and Reauthorization Act (SARA), to mitigate the threat posed by drums, containers, and tanks of hazardous substances/wastes abandoned at the Conus Chemical, Inc. site in Newark, New Jersey.

An investigation by EPA confirmed the presence of approximately 1,000 scattered drums, containers, and tanks of hazardous substances at the site. Labels on some of the containers indicate the contents to be predominantly acids, solvents, flammable and corrosive wastes. Many of the drums and tanks are leaking, deteriorated, and present the potential for human exposure through direct contact or discharge into the environment. Many of these materials are incompatible, highly reactive, and present a significant threat of a release if mixed. These materials also present a fire hazard under their present storage conditions. Three fires have occurred at this site over the past three years, with the most recent incident occurring on January 31, 1990.

These hazardous substances pose a threat to citizens of the community and firefighters who might respond to a fire at the facility. This site is also in close proximity to Highway 95 (NJ Turnpike) one of the busiest highways in the country and to a busy cargo train track.

On February 12, 1990, the On-Scene Coordinator (OSC) used his $50,000 emergency contract OSC authority to institute site security and begin site stabilization at this site. The initial Delivery Order was issued for a mitigation ceiling of $40,000. On February 23, 1990, Kathy Callahan, Deputy Director, Emergency and Remedial Response Division, gave verbal approval for a $250,000 total project ceiling, with a mitigation ceiling of $200,000.

The removal action clean-up will be conducted in two different phases. Phase I, currently in progress, will address immediate site stabilization by providing a fence to the site, segregating the incompatible chemicals, overpacking of leaking or badly corroded drums and addressing room #2 (figure 2) with potential shock sensitive compounds. During this phase EPA does not intend to remove anything from the site with the exception of out-of-date or shock sensitive substances. It is estimated that funding for Phase I will be approximately $250,000.

Phase II will address sampling for disposal, transportation and disposal of the chemicals/hazardous substances or disposal to recycling facilities. This phase will only go in effect if the Potential Responsible Parties (PRPs) decide not to agree to perform this phase under an Administrative Order. However, funding is requested now for this phase due to the strong possibility of the PRP's non-compliance with an EPA Administrative Order.

This Action Memorandum recommends that a removal action be conducted pursuant to CERCLA, as amended by SARA, in the form of a removal and disposal of the hazardous substances contained in various tanks, drums and other type containers on this site. The total project ceiling for this removal action would be $1,998,000 of which $1,288,000 is for mitigation contracting.

II. BACKGROUND:

A. Site Description

The Conus Chemical Company occupies Block 5005, Lot 4 of an old industrial park located at 185 Foundry Street, Newark, New Jersey (aka 96 Roanoke Avenue). The property is owned by Norpak Corporation. The industrial park is situated in the triangular area formed by the convergence of the New Jersey Turnpike and the Pulaski Skyway (Route 1/9). The Turnpike is less than 100 yards to the east of the site, and Route 1/9 is located approximately 300 yards to the west. Consolidated Rail Corporation (Conrail) right-of-way borders the site on the west side. The Ironbound section of Newark, a densely populated residential area, is located less than 500 feet to the west. The John Hyatt Court Housing Development, which houses 393 people, is immediately adjacent to the west of the site. The Hawkins Elementary School

is less than 1/2 mile from the site. Approximately, 25,000 people live within a one mile radius of the site.

The Conus facility is a two story brick building with concrete floors. Drains are located in the floor providing a possible egress route for materials in the event of a release in the building either to the sewer system or directly to the Arthur Kill. The building is equipped with a water sprinkler system that appears to be intact and may be operational. Doors to the facility are secure, however, the building is accessible through the windows. The building does appear to be structurally sound.

A small portion of the property is protected by a chain-link fence. This area is located at the southern corner of the facility and is on Conrail property. The fence encloses an outside storage area containing 55 gallon unlabelled drums, some stacked three high. Most of the drums appear empty, but some do contain unknown material.

The area surrounding the site is industrialized and comprised of old buildings. The streets are dimly lit and littered with discarded tires and other debris. Vandalism and break-ins are a continual problem in the area. The burning of stolen or abandoned vehicles have been reported on Foundary Street not far from the site.

The Conus Chemical Company operated as a chemical brokerage and distributor at the Roanoke Avenue location until December of 1989. Operations included the repackaging and sale of bulk chemicals purchased from various manufacturers. The Conus inventory of materials included, but was not limited to: acids, alcohols, solvents, petroleum products, corrosives, reactives and flammable materials. Part of the Conus inventory was purchased from the Berg Chemical Company, Inc., Bronx, New York upon the declaration of bankruptcy by the Berg Chemical Company in 1984. The products purchased included petrochemicals and other chemicals and equipment related to the chemical distribution business. On December 31, 1989, the property leased to the Conus Chemical Company was legally terminated by the Norpak Corporation. Termination of the lease was based on late and unpaid rent.

B. Incident/Release Characteristics

On January 31, 1990, EPA, Response and Prevention Branch, responded to a fire at the Conus Chemical site. The fire, of suspicious origin, was immediately adjacent to the 55 gallon drums stored on Conrail property that adjoins the Conus site. During this response, EPA conducted a preliminary assessment at this site and found approximately 1,000 containers of hazardous

substances and unknown materials stored haphazardly on-site. Incompatible materials were stored in close proximity to one another; some containers show evidence of leakage and visible evidence exists of leakage of materials on the floor. There is also evidence of the release of a blue/green liquid at the south-west corner, outside of the building.

At present, the building structures at the Conus facility remain in fair condition despite acts of vandalism. The doors of the facility are locked. However, it would be possible to gain entry through unsecured windows.

C. Quantities and Types of Known Present Substances

Approximately, 1,000 drums, containers, and tanks of hazardous substances are stored on the site. Based on information obtained from container labels during EPA's investigation, the following substances have been tentatively identified on site:

Compound	Statutory Source For Designation as Hazardous Substances*
Pyridine	RCRA Section 3001
Toluene	CWA Section 311 (b) (2) (a) CWA Section 307 (a) RCRA Section 3001
Naphtha	CWA Section 311 (b) (2) (a) CWA Section 307 (a) RCRA Section 3001
m-Xylene	CWA Section 311 (b) (2) (a) RCRA Section 3001
Trichloroethylene	CWA Section 311 (b) (2) (a) CWA Section 307 (a) RCRA Section 3001
Chloroethylene	CWA Section 307 (a)
Ethyl Ether	RCRA Section 3001
Phosphoric Acid	CWA Section 311 (b) (2) (a)
Tetrahydrofuran	RCRA Section 3001

Mercury	CWA Section 307 (a) CAA Section 112 RCRA Section 3001
Hydrofluoric Acid	CWA Section 311 (b) (2) (a) RCRA Section 3001

*CWA - Clean Water Act
CAA - Clean Air Act
RCRA - Resource Conservation and Recovery Act

These hazardous substances are acutely toxic, chronically toxic, corrosive, reactive, and/or highly flammable.

The potential health effects from the compounds are identified below:

POTENTIAL HEALTH AND TOXICOLOGICAL EFFECT AND FLAMMABILITY

COMPOUND	Carcinogenicity	Liver Damage	Kidney Damage	Respiratory Damage	Central Nervous System Damage	Dermal Effects	Cardiovascular Effects	Flammability
Pyridine		X	X	X	X	X		X
Toluene		X	X	X	X	X		X
Chloroethylene	X	X		X	X	X		X
m-Xylene		X	X	X	X	X	X	X
Trichloroethylene	X	X	X		X			
Ethyl Ether		X	X		X	X	X	
Naphtha				X		X		X
Phosphoric Acid		X	X	X	X	X		
Tetrahydrofuran			X	X	X	X		
Mercury				X				
Hydrofluoric Acid								

Many of the drums on site are unlabelled and, therefore, contain unidentified substances.

D. National Priorities List Designation

This site is not listed on the National Priorities List (NPL).

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

A. Threat of Public Health or Welfare

The primary threat by the abandoned drums, containers, and tanks is that of exposure through direct human contact, fire, explosion, and vapor exposure caused by a reaction of the hazardous substances. There is also a threat of a discharge of hazardous substances into the environment.

The EPA emergency response conducted in January 31, 1990, to the fire, found that the drums and containers are haphazardly stored in the facility irrespective of their contents or condition.

Many of the drums are in various stages of deterioration and/or leaking. Many of the materials identified are incompatible, highly reactive, and flammable. In addition, many of these materials can potentially auto-ignite and/or produce highly toxic vapors and fumes if mixed. Some of these materials are potentially unstable and explosive when stored under the present conditions.

The impact of a fire or vapor release from the mixing of incompatible reactive materials on the site would be significant. The facility is contiguous with an operating facility and is directly adjacent to a residential neighborhood. The vapors produced during a fire or runaway chemical reaction could be extremely hazardous to area residents and workers at the neighboring facility. It would also be difficult for firefighters to avoid contamination from smoke and fumes during firefighting efforts. Most conventional firefighting techniques would only serve to aggravate the situation by increasing the reactivity and vapor production of many of the substances during a fire or runaway chemical reaction at the site. The runoff produced from firefighting operations could contaminate nearby properties and groundwater.

There is a potential for human exposure from direct contact with the hazardous substances at the site. The site has a history of vandalism through break-ins and arson. There have been three fires at the site over the past three years. Many of the hazardous substances on-site are highly toxic and corrosive on contact. Several of the substances are known or suspected carcinogens.

B. Threat to the Environment

Evidence of past spills, including liquid stains and residues, exist throughout the building. A floor drainage system channels liquids into the sewer system of Newark, which enters the Passaic Valley Authority Sewage Treatment Plant. There is the

possibility that some of this material may be discharged directly into the Arthur Kill through the storm sewer.

Air monitoring performed on January 31, 1990, during an EPA's response investigation showed levels of contaminants in the site detectable above background. The poor condition of many of the drums and containers noted during the investigation suggests a potential for a release into the environment.

IV. ENFORCEMENT

The Conus Chemical Company has been an on-going case with NJDEP since March, 1987. The Company had been issued numerous Notices of Violations (NOVs), the most recent in January 1990. Past NOVs, issued by NJDEP, include discharge of hazardous substances, failure to inform necessary agencies of releases, hazardous waste storage without an EPA RCRA identification number, improper storage of hazardous waste and many others.

Officials of the Conus Company were contacted by the NJDEP and directed to assume responsibility for the materials abandoned on the site. Conus officials responded by stating that the finances to conduct a clean-up of the facility were not available.

On January 31, 1990, Norpak Corporation accepted responsibility for the abandoned chemicals and agreed to clean the property with NJDEP supervision. Due to conditions developing as a result of a fire on January 31, 1990 at the Conus building, NJDEP and EPA, requested immediate action from Norpak to abate any possible threats from the stored chemicals. EPA issued, on January 31, 1990, a CERCLA Field Expedient Notice Letter, to support the States' action. Norpak Corporation responded by providing site security, securing of windows damaged by the fire, and overpacking some leaking and deteriorated drums that were leaking stored outside of the building. Norpak promised NJDEP an immediate action to get rid of the chemicals stored inside/ outside of the building, but this never took place.

Based upon a lack of immediate action by Norpak, NJDEP requested on February 9, 1990, that EPA undertake a removal action on this site. EPA had determined, based upon the January 31, 1990, inspection, that an imminent and substantial endangerment existed at the site and that a removal action was required to mitigate the existing hazardous conditions. The stabilization phase was instituted on February 20, 1990. Discussions with Norpak are continuing in an attempt to reach agreement, whereby Norpak would conduct the removal action under the terms of an executed Consent Order.

On February 16, 1990, EPA met with representatives of Norpak Corp. and informed Norpak that EPA would stabilize the site by eliminating the existing threats (Phase I), and that Norpak woul

be given the opportunity to complete the site remediation (Phase II), under the terms of an Administrative Order on Consent. On February 12, 1990, EPA initiated a removal action at this site in the initial form of site security.

V. PROPOSED PROJECT AND COSTS

A. Objective of the Project

The objective of this project is: 1) to abate the actual or potential threat to public health and welfare; 2) to immediately mitigate the actual or potential threat of fire, explosion, or release of hazardous substances into the environment in accordance with Section 300.65 of the National Contingency Plan (NCP) and 3) to remove and dispose of the hazardous substances at the site in accordance with the Resource Conservation and Recovery Act (RCRA) and EPA's CERCLA Off-Site Treatment, Storage, and Disposal Policy, Section 121(d)(3) of SARA.

The objective will be achieved by performing the following tasks under a two phase approach:

Phase I

1) 24-Hour Site Security:

Twenty-four hour site security initiated and maintained. Fence will be repaired and warning labels posted.

2) Segregation and Sampling:

Materials will be segregated on-site by existing identification labels and container condition to ensure proper segregation of incompatible materials. Unknown materials will be sampled for disposal and segregation purposes.

3) Securing Drums and Containers:

Leaking or unsecured drums and containers will be overpacked and sampled for bulking/disposal. All materials will be stored on-site in a secured area.

Phase II

1) Sampling for Disposal:

Manufacturers which can be identified will be contacted to reclaim those materials that can be reused or recycled. EPA will dispose of unusable or non-recyclable materials at an approved disposal facility.

2) Drums will be sampled for disposal purposes.

B. Project Estimated Costs

Phase I

1) Extramural Costs:		
a) Mitigation Contracting (ERCS)		
i. Fence repair and labeling	$	2,000
ii. Labor: including mobilization/demobilization, sampling, segregation, staging, and overpacking. (1 Response Manager, 1 Chemist, 1 Foreman, 1 Operator, 2 Clean-up Tech's, 1 Field Clerk)	$	90,000
iii. Equipment: 1 pollution control truck, 1 forklift, Level B personal protective gear, non-spark tools, etc.)	$	5,000
iv. Materials and field purchases: (overpack drums, sampling materials, etc.)	$	15,000
v. Laboratory analysis for compatibility:	$	30,000
SUBTOTAL	$	142,000
20% Contingency	$	28,400
SUBTOTAL (Contract Mitigation Costs)	$	170,400
Rounded Contract Mitigation Costs (nearest $1,000)	$	170,000
	$	30,000
b) TAT Costs:	$	200,000
SUBTOTAL EXTRAMURAL COSTS	$	30,000
15% Contingency of Extramural Costs	$	230,000
TOTAL EXTRAMURAL COSTS	$	20,000
2) Intramural EPA Costs:	$	250,000
ESTIMATED TOTAL PROJECT CEILING PHASE I		

Phase II

1) Extramural Costs:
a) Mitigation Contracting (ERCS)

i. Labor: including mobilization/demobilization, sampling, segregation, staging, and overpacking.	
(1 Response Manager, 1 Chemist, 1 Foreman, 1 operator, 2 Clean-up Tech's, 1 Field Clerk)	$ 270,000
ii. Equipment: 1 pollution control truck, 1 forklift, Level B personal protective gear, non-spark tools, etc.	$ 42,000
iii. Materials and field purchases: (overpack drums, sampling materials, etc.)	$ 89,000
iv. Laboratory disposal analysis:	$ 47,000
v. Transportation and disposal	$ 484,000
SUBTOTAL	$ 932,000
20% Contingency	$ 186,400
SUBTOTAL (Contract Mitigation Costs)	$ 1,118,400
Rounded Contract Mitigation Costs (nearest $1,000)	$ 1,118,000
b) TAT Costs:	$ 280,000
SUBTOTAL EXTRAMURAL COSTS	$ 1,398,000
15% Contingency of Extramural Costs	$ 209,700
TOTAL EXTRAMURAL COSTS	$ 1,607,700
TOTAL ROUNDED EXTRAMURAL COSTS (nearest $1,000)	$ 1,608,000
2) Intramural EPA Costs:	$ 140,000
ESTIMATED TOTAL PROJECT CEILING PHASE II	$ 1,748,000
ESTIMATED TOTAL PROJECT CEILING PHASE II	$ 250,000
ESTIMATED TOTAL PROJECT CEILING PHASE I/PHASE II	$ 1,998,000

Overall project costs could be reduced if manufacturers are able to reclaim materials for recycling or reuse.

C. Project Schedule

Phase I of this removal action will take four to seven weeks to complete. During this time, a fence will be installed, drums will be segregated and overpacked if necessary, and sampled for disposal. Phase II will involve the sampling for disposal of the remaining containers and shipment and disposal of all hazardous substances on-site.

Final removal and disposal should be complete within four to six weeks of receipt of the disposal analysis results. Notifying and coordinating with manufacturers to reclaim materials could add or delete 2-4 weeks to the project schedule.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION BE DELAYED:

Delayed action in securing the situation and removing the hazardous substances will extend the period of time that nearby workers and private citizens are exposed to the threat of the fire and explosion and direct human contact that exist at the site.

VII. RECOMMENDATION

Conditions at the Conus Chemical Corp. site meet the criteria for a removal action under 40 CFR § 300.65(b)(2) of the National Oil and Hazardous Substances Contingency Plan (NCP) in that there exists:

a) Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain (40 CFR § 300.65(b)(2)(i));

b) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release (40 CFR § 300.65(b)(2)(iii));

c) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released (40 CFR § 300.65(2)(b)(v)); and

d) Threat of fire or explosion (40 CFR § 300.65(b)(2)(vi)).

This removal action is consistent with the Section 104(b)(2) of CERCLA, as amended by SARA, in that it will accomplish the efficient performance of long-term remedial measures in the short term.

I therefore recommend your approval of this CERCLA removal funding request. The estimated project ceiling for this site is $1,998,000, of which $1,288,000 is for mitigation contracting.

The estimated costs of this project are within the Regional Advice of Allowance for FY-90.

Please indicate your approval and authorization of funding for the Conus Chemical Corp. site, per your authority pursuant to Assistant Administrator J. Winston Porter's May 25, 1988, Redelegation Memorandum, Delegation Number R-14-1-A.

Approval: _____ Date 3/14/90

Disapproval: _____ Date _____

cc: (After Approval is obtained)

S. Luftig, 2ERR
R. Salkie, 2ERR-ADREPP
B. Sprague, 2ERR-RPB
J. Frisco, 2ADNJP
J. Marshall, 2OEP
D. Karlen, 2ORC-NJSUP
R. Gherardi, 2OPM-FIN
S. Anderson, PM-214F (EXPRESS MAIL)
H. Crump, OS-210
J. Trela, NJDEP
C. Moyik, 2ERRD-PS
L. Guarneiri, OS-210
J. Rosianski, 2OEP
C. Fitzsimmons, 2ERR-RPB
P. McKechnie, 2IG
D. Henne, TATL